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# Physical Activity and Nutrition

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## NO LEISURE TIME PHYSICAL ACTIVITY

**Definition:** Respondents who report no leisure time physical activity or exercise during the past 30 days other than the respondent's regular job.

### Prevalence of No Leisure Time Physical Activity

- South Dakota 22.6%
- Nationwide median 22.6%

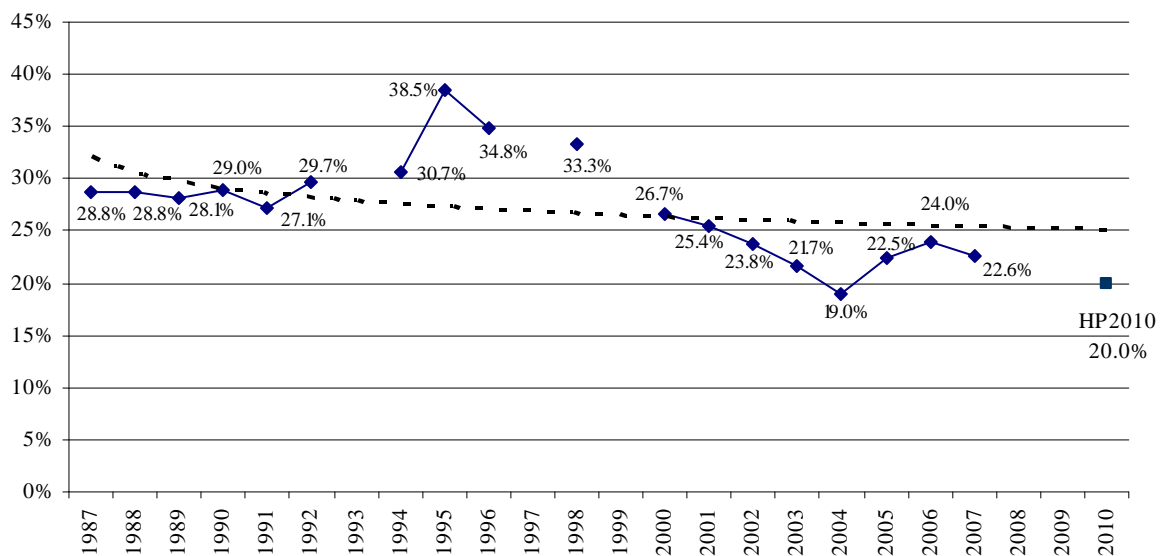
### Healthy People 2010 Objective

*Reduce the proportion of adults who engage in no leisure time physical activity to 20 percent.*

### Trend Analysis

This question was first asked in 1987 and hit its peak in 1995 with 38.5 percent of the respondents stating that they did not engage in a leisure time physical activity. Since 2000, the percent of respondents who do not engage in a leisure time physical activity had been decreasing until 2005 when there was an increase to 22.5 percent. South Dakota had reached the *Healthy People 2010 Objective* of 20 percent in 2004 with 19.0 percent.

**Figure 5**  
**Percent of Respondents Who Reported No Leisure Time Physical Activity,  
1987-1992, 1994-1996, 1998 and 2000-2007**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1987-1992, 1994-1996, 1998 and 2000-2007

### Demographics

#### **Gender**

There was no significant difference between males and females overall. However, males in the central region did exhibit a significantly higher prevalence of no leisure time physical activity than females, while American Indian females showed a significantly higher prevalence than American Indian males.

<b>Age</b>	The prevalence of no leisure time physical activity increases as age increases. This includes significant increases as the 65-74 and 75 and older age groups are reached.
<b>Race</b>	There were no significant racial differences shown by the data.
<b>Region</b>	Those in the central region show a very high prevalence of no leisure time physical activity, while those in the west region exhibit a very low prevalence. This regional difference is much more evident in males.
<b>Household Income</b>	The prevalence of no leisure time physical activity decreases as household income increases. This includes significant decreases as the \$50,000-\$74,999 and \$75,000 or more income groups are reached.
<b>Education</b>	The prevalence of no leisure time physical activity decreases as education increases. These decreases are most evident as the some post-high school and college graduate levels are reached.
<b>Employment Status</b>	Those who are unable to work exhibit a very high prevalence of no leisure time physical activity, while those who are employed for wages, unemployed, or a homemaker show a very low prevalence.
<b>Marital Status</b>	Those who are widowed demonstrate a very high prevalence of no leisure time physical activity, while those who are married or have never been married show a very low prevalence.

**Table 8**  
**Respondents Who Reported No Leisure Time Physical Activity, 2007**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Total</b>	<b>6,865</b>	<b>22.6</b>	<b>(21.3-24.0)</b>	<b>2,814</b>	<b>21.4</b>	<b>(19.5-23.4)</b>	<b>4,051</b>	<b>23.8</b>	<b>(22.0-25.7)</b>
<b>Age</b>									
18-24	239	11.5	(7.0-18.4)	123	9.2	(4.1-19.3)	116	14.0	(7.3-25.1)
25-34	764	16.3	(13.3-19.7)	305	16.9	(12.4-22.5)	459	15.6	(12.2-19.8)
35-44	926	18.5	(15.6-21.7)	421	17.7	(13.9-22.3)	505	19.2	(15.3-23.9)
45-54	1,417	23.3	(20.9-25.9)	599	24.1	(20.4-28.1)	818	22.6	(19.4-26.1)
55-64	1,342	25.7	(23.1-28.5)	571	24.6	(20.9-28.7)	771	26.9	(23.4-30.7)
65-74	1,058	33.0	(29.7-36.5)	420	34.2	(29.2-39.7)	638	32.0	(27.8-36.5)
75+	1,052	40.4	(36.9-43.9)	363	36.2	(30.6-42.2)	689	43.0	(38.8-47.3)
<b>Race</b>									
White	6,019	22.6	(21.2-24.1)	2,470	22.1	(20.1-24.3)	3,549	23.1	(21.2-25.1)
American Indian	591	23.8	(19.2-29.1)	232	16.5	(11.1-24.0)	359	31.3	(24.5-38.9)
<b>Region</b>									
Southeast	1,540	22.0	(19.5-24.8)	643	20.3	(16.8-24.3)	897	23.8	(20.3-27.7)
Northeast	1,492	24.5	(22.1-27.1)	630	23.5	(20.0-27.5)	862	25.6	(22.5-29.0)
Central	1,429	26.0	(23.4-28.8)	578	30.1	(25.9-34.8)	851	22.2	(19.1-25.7)
West	1,532	19.9	(17.5-22.5)	604	16.4	(13.4-19.9)	928	22.7	(19.3-26.6)
American Indian Counties	872	22.6	(19.1-26.7)	359	20.8	(15.8-26.8)	513	24.5	(19.7-30.1)
<b>Household Income</b>									
Less than \$10,000	311	42.8	(31.5-55.0)	103	38.2	(25.9-52.2)	208	45.7	(29.7-62.7)
\$10,000-\$14,999	368	38.1	(31.2-45.5)	122	34.3	(25.0-45.1)	246	40.3	(31.2-50.3)
\$15,000-\$19,999	501	33.7	(28.1-39.9)	178	35.5	(26.2-46.1)	323	32.4	(25.7-39.9)
\$20,000-\$24,999	664	28.3	(23.8-33.3)	232	26.3	(19.8-34.0)	432	29.6	(23.6-36.4)
\$25,000-\$34,999	884	25.2	(21.6-29.1)	389	24.5	(19.4-30.4)	495	26.0	(21.5-31.0)
\$35,000-\$49,999	1,158	23.8	(20.8-27.0)	527	24.9	(20.7-29.5)	631	22.7	(18.6-27.3)
\$50,000-\$74,999	1,068	17.3	(14.7-20.2)	487	19.4	(15.5-24.1)	581	15.0	(11.9-18.6)
\$75,000+	1,036	11.4	(9.3-13.8)	528	10.7	(8.0-14.1)	508	12.3	(9.4-15.9)

Table 8 (continued)									
Respondents Who Reported No Leisure Time Physical Activity, 2007									
	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Education</b>									
8th Grade or Less	262	41.8	(34.4-49.6)	140	35.6	(26.4-46.0)	122	52.9	(42.5-63.0)
Some High School	382	31.7	(25.1-39.0)	149	25.5	(17.2-36.0)	233	37.9	(29.0-47.7)
High School or G.E.D.	2,275	30.1	(27.3-33.0)	998	27.8	(24.1-31.9)	1,277	32.5	(28.5-36.8)
Some Post-High School	1,925	22.0	(19.7-24.4)	683	22.5	(18.8-26.8)	1,242	21.5	(18.9-24.5)
College Graduate	2,009	12.0	(10.4-13.9)	841	11.1	(8.9-13.7)	1,168	13.0	(10.7-15.7)
<b>Employment Status</b>									
Employed for Wages	3,204	18.9	(17.1-20.9)	1,290	18.1	(15.5-21.0)	1,914	19.8	(17.2-22.6)
Self-employed	967	24.4	(21.1-27.9)	639	24.9	(20.9-29.3)	328	23.2	(17.9-29.4)
Unemployed	162	25.0	(16.4-36.2)	*	*	*	*	*	*
Homemaker	436	23.3	(18.4-29.1)	*	*	*	*	*	*
Retired	1,657	32.2	(29.6-34.9)	628	27.8	(24.0-32.1)	1,029	35.7	(32.4-39.2)
Unable to Work	329	48.7	(41.5-56.0)	135	47.2	(37.4-57.1)	194	50.1	(39.6-60.5)
<b>Marital Status</b>									
Married/Unmarried Couple	4,119	21.3	(19.8-22.8)	1,818	21.6	(19.5-23.9)	2,301	20.9	(19.0-23.0)
Divorced/Separated	938	29.7	(26.1-33.5)	400	29.1	(24.1-34.7)	538	30.2	(25.4-35.5)
Widowed	1,052	41.0	(37.7-44.5)	177	43.1	(34.7-51.9)	875	40.6	(36.9-44.4)
Never Married	738	16.7	(12.4-22.1)	414	14.9	(10.1-21.4)	324	19.6	(12.3-29.7)

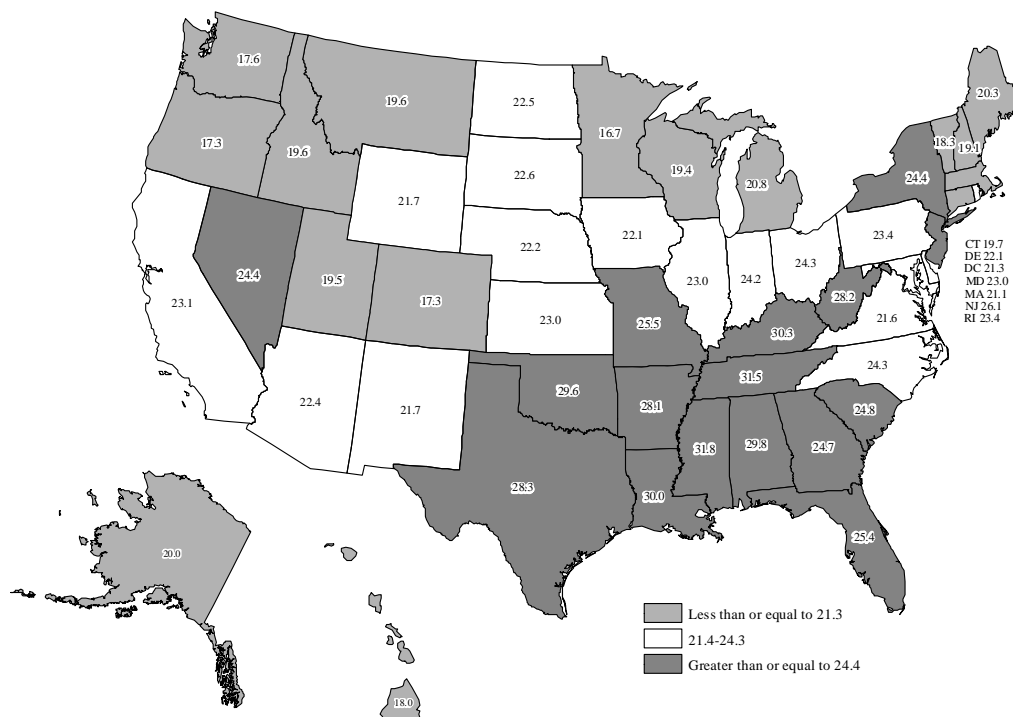
Note: \*Results based on sample sizes less than 100 have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007

## National Statistics

The national median for respondents who reported no leisure time physical activity was 22.6 percent. South Dakota had 22.6 percent of respondents who reported no leisure time physical activity. Minnesota had the lowest percent of respondents who reported no leisure time physical activity with 16.7 percent, while Mississippi had the highest percent of respondents who reported no leisure time physical activity with 31.8 percent.

**Figure 6**  
Nationally, Respondents Who Reported No Leisure Time Physical Activity, 2007



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007

## **Further Analysis**

Following are data illustrating the percent of those who do not engage in leisure time physical activity for various health behaviors and conditions. For example, 41.3 percent of respondents who stated they have fair or poor health have no leisure time physical activity, while 19.9 percent of respondents who stated they have excellent, very good, or good health have no leisure time physical activity.

<b>Table 9</b>			
<b>No Leisure Time Physical Activity for Selected Health Behaviors and Conditions, 2007</b>			
<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Leisure Time Physical Activity</b>	<b>95% CI</b>
Obese (BMI = 30.0+)	1,836	28.5	25.6-31.5
Overweight (BMI = 25.0-29.9)	2,560	20.9	19.1-22.9
Recommended Weight (BMI = 18.5-24.9)	2,056	18.1	15.7-20.6
No Moderate Physical Activity	3,549	33.1	30.9-35.3
Moderate Physical Activity	2,833	9.6	8.4-11.0
No Vigorous Physical Activity	5,209	28.1	26.4-29.8
Vigorous Physical Activity	1,347	5.0	3.8-6.6
Less Than Five Servings of Fruits and Vegetables	5,370	24.1	22.6-25.7
At Least Five Servings of Fruits and Vegetables	1,366	15.7	13.5-18.2
Current Smoker	1,294	29.8	26.3-33.7
Former Smoker	1,984	23.8	21.6-26.1
Never Smoked	3,574	19.6	17.9-21.4
Smokeless Tobacco Use	308	22.8	17.5-29.2
No Smokeless Tobacco Use	6,268	22.2	20.8-23.6
Diabetes	659	32.2	28.0-36.6
No Diabetes	6,205	21.9	20.5-23.4
Hypertension	2,346	31.2	29.0-33.5
No Hypertension	4,513	19.6	18.0-21.3
High Blood Cholesterol	2,235	27.1	24.9-29.4
No High Blood Cholesterol	3,422	20.5	18.7-22.4
No Health Insurance (18-64)	407	22.1	17.3-27.9
Health Insurance (18-64)	4,031	18.5	17.0-20.2
Employer Based Health Insurance Coverage (18-64)	2,587	16.8	15.1-18.6
Private Health Insurance Plan (18-64)	557	17.3	13.8-21.5
Medicare (18-64)	157	38.8	29.0-49.7
Medicaid or Medical Assistance (18-64)	158	30.7	17.9-47.5
The Military, CHAMPUS, TriCare, or the VA (18-64)	229	21.9	15.7-29.6
The Indian Health Service (18-64)	266	27.2	19.6-36.3
No Flu Shot (65+)	504	40.5	35.5-45.7
Flu Shot (65+)	1,599	35.8	33.1-38.7
No Pneumonia Shot (65+)	725	35.8	31.7-40.0
Pneumonia Shot (65+)	1,297	37.4	34.4-40.6
Doesn't Use Sun Block	4,149	22.2	20.5-23.9
Uses Sun Block	1,610	14.8	12.8-17.1
Doesn't Know Cervical Cancer - HPV Connection (Females)	799	33.7	29.8-37.8
Knows Cervical Cancer - HPV Connection (Females)	3,015	21.4	19.3-23.6
Drank Alcohol in Past 30 Days	3,518	18.8	17.2-20.6
No Alcohol in Past 30 Days	3,303	27.7	25.5-30.0
Binge Drinker	881	14.1	11.7-17.0
Not a Binge Drinker	5,840	24.1	22.7-25.6
Heavy Drinker	220	16.6	11.7-22.9
Not a Heavy Drinker	6,431	22.4	21.1-23.8
Previously Had a Heart Attack	462	37.3	32.1-42.7
Never Had a Heart Attack	6,376	21.9	20.5-23.3

<b>Table 9 (continued)</b> <b>No Leisure Time Physical Activity for Selected Health Behaviors and Conditions, 2007</b>			
<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Leisure Time Physical Activity</b>	<b>95% CI</b>
Have Angina or Coronary Heart Disease	402	37.4	32.1-43.1
Do Not Have Angina or Coronary Heart Disease	6,389	22.0	20.6-23.4
Previously Had a Stroke	265	40.4	33.5-47.6
Never Had a Stroke	6,587	22.1	20.7-23.5
Current Asthma	501	29.1	22.5-36.6
Former Asthma	172	18.4	12.4-26.3
Never Had Asthma	6,151	22.1	20.8-23.5
Arthritis	2,432	30.6	28.4-33.0
No Arthritis	4,328	19.6	18.0-21.4
Arthritis - Activities Limited	1,168	38.0	34.6-41.6
No Arthritis - Activities Limited	5,571	20.2	18.8-21.7
Fair or Poor Health Status	1,153	41.3	37.4-45.2
Excellent, Very Good, or Good Health Status	5,692	19.9	18.5-21.4
Physical Health Not Good for 30 Days of the Past 30	506	50.4	44.7-56.2
Physical Health Not Good for 0-29 Days of the Past 30	6,208	20.8	19.4-22.2
Mental Health Not Good for 20-30 Days of the Past 30	376	32.8	27.1-39.1
Mental Health Not Good for 0-19 Days of the Past 30	6,369	21.9	20.6-23.4
Usual Activities Unattainable for 10-30 Days of the Past 30	493	46.9	41.3-52.5
Usual Activities Unattainable for 0-9 Days of the Past 30	6,309	21.0	19.6-22.4
Dissatisfied / Very Dissatisfied with Life	269	39.2	31.3-47.8
Satisfied / Very Satisfied with Life	6,327	21.4	20.1-22.8
Physical, Mental, or Emotional Disability	1,564	34.7	31.7-37.8
No Physical, Mental, or Emotional Disability	5,229	19.7	18.2-21.2
Disability with Special Equipment Needed	615	49.3	44.5-54.2
No Disability with Special Equipment Needed	6,183	20.8	19.4-22.2
Two or More Hours of TV Watched Per Day	4,884	25.1	23.5-26.8
Less Than Two Hours of TV Watched Per Day	1,588	14.1	12.2-16.3
Never Been Tested for HIV (18-64)	3,443	19.0	17.3-20.7
Been Tested for HIV (18-64)	1,002	17.6	14.3-21.5
Diarrhea in Past 30 Days	965	25.4	21.8-29.3
No Diarrhea in Past 30 Days	5,613	21.7	20.3-23.2
Military Veteran	1,007	25.3	22.3-28.5
Not a Military Veteran	5,855	22.2	20.7-23.7

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007

## **NO MODERATE PHYSICAL ACTIVITY**

***Definition: Respondents who report doing less than 30 minutes per day of moderate physical activity, or less than five days per week of moderate physical activity.***

### **Prevalence of No Moderate Physical Activity**

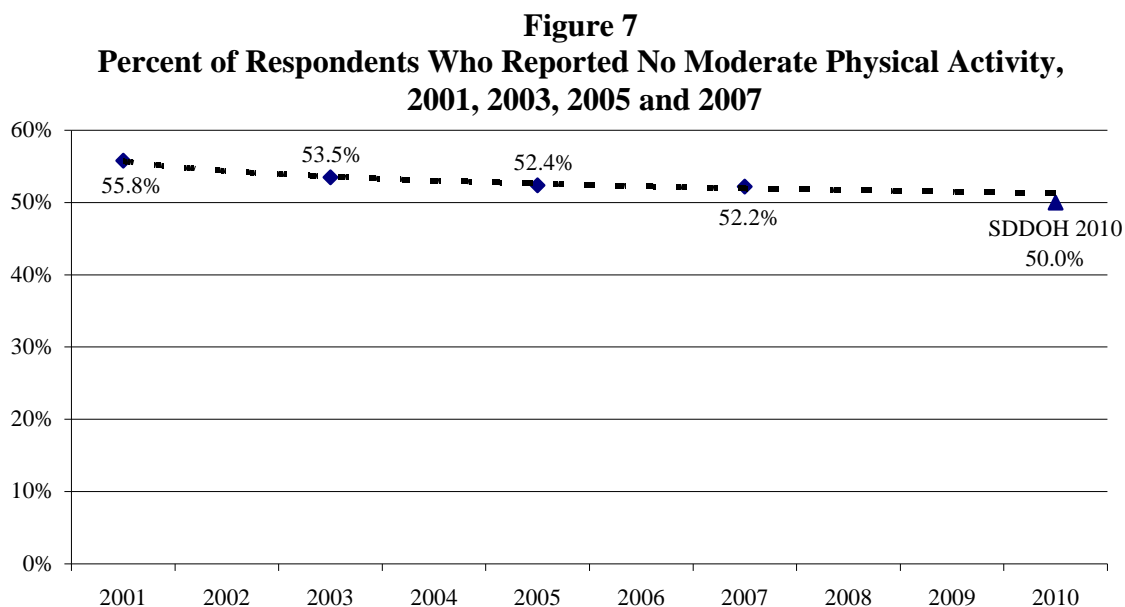
- South Dakota 52.2%
- Nationwide median 50.5%

### **South Dakota Department of Health 2010 Initiative**

*Decrease the percent of adults who are physically inactive on a regular basis to 50 percent.*

### **Trend Analysis**

This question was first asked in 2001 with 55.8 percent of respondents reporting no moderate physical activity. Since then, the percent of respondents who reported no moderate physical activity has been decreasing. South Dakota has yet to meet the *South Dakota Department of Health 2010 Initiative* goal of 50 percent.



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2001, 2003, 2005 and 2007

### **Demographics**

<b>Gender</b>	There is no gender difference exhibited by the available data for no moderate physical activity.
<b>Age</b>	No moderate physical activity generally increases as age increases with the most significant increase occurring as the 75 and older age group is reached.
<b>Race</b>	There are no racial differences observed from the available data.
<b>Region</b>	There are no regional differences shown by the available data.

<b>Household Income</b>	The prevalence of no moderate physical activity decreases for females as household income increases. Males do not exhibit this same association.
<b>Education</b>	The prevalence of no moderate physical activity decreases for females as education increases. This association is not as strong for males.
<b>Employment Status</b>	Those who are unable to work exhibit a very high prevalence of no moderate physical activity, while those who are employed for wages, self-employed, unemployed, or a homemaker show a very low prevalence.
<b>Marital Status</b>	Those who are widowed demonstrate a significantly higher prevalence of no moderate physical activity than the other three marital status groups. These differences are much more evident with females.

**Table 10**  
**Respondents Who Reported No Moderate Physical Activity, 2007**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Total</b>	<b>6,388</b>	<b>52.2</b>	<b>(50.4-54.0)</b>	<b>2,624</b>	<b>50.2</b>	<b>(47.6-52.9)</b>	<b>3,764</b>	<b>54.1</b>	<b>(51.7-56.4)</b>
<b>Age</b>									
18-24	226	44.4	(36.3-52.7)	115	37.5	(27.3-48.9)	111	51.1	(39.5-62.7)
25-34	727	44.7	(40.4-49.0)	285	42.3	(35.8-49.1)	442	47.1	(41.8-52.5)
35-44	879	48.0	(44.1-52.0)	400	48.7	(43.0-54.4)	479	47.4	(42.1-52.7)
45-54	1,326	53.6	(50.3-56.8)	553	57.3	(52.3-62.2)	773	50.0	(45.8-54.2)
55-64	1,256	58.6	(55.4-61.8)	537	56.1	(51.2-60.8)	719	61.4	(57.2-65.5)
65-74	972	57.2	(53.5-60.8)	387	55.7	(49.9-61.4)	585	58.5	(53.6-63.1)
75+	947	67.3	(63.6-70.7)	340	61.7	(55.4-67.6)	607	71.0	(66.6-75.0)
<b>Race</b>									
White	5,603	52.5	(50.6-54.3)	2,304	51.0	(48.2-53.8)	3,299	53.8	(51.3-56.3)
American Indian	554	49.2	(42.7-55.8)	217	44.7	(34.9-55.0)	337	53.5	(44.8-61.9)
<b>Region</b>									
Southeast	1,418	54.1	(50.6-57.5)	594	52.2	(47.1-57.2)	824	56.0	(51.4-60.5)
Northeast	1,386	53.6	(50.2-56.9)	591	51.8	(46.8-56.8)	795	55.5	(51.1-59.7)
Central	1,318	52.4	(48.8-55.9)	530	53.8	(48.4-59.1)	788	51.1	(46.3-55.9)
West	1,444	47.7	(44.3-51.1)	569	43.4	(38.6-48.3)	875	51.1	(46.4-55.8)
American Indian Counties	822	50.8	(45.7-55.9)	340	47.5	(40.0-55.2)	482	54.1	(47.2-60.8)
<b>Household Income</b>									
Less than \$10,000	278	66.4	(56.1-75.4)	*	*	*	*	*	*
\$10,000-\$14,999	333	65.6	(57.6-72.8)	112	59.8	(46.6-71.7)	221	69.1	(59.2-77.5)
\$15,000-\$19,999	469	64.2	(57.4-70.4)	166	59.8	(48.0-70.6)	303	67.3	(59.4-74.3)
\$20,000-\$24,999	609	53.7	(47.1-60.1)	214	47.7	(38.5-57.2)	395	57.7	(48.9-66.0)
\$25,000-\$34,999	829	55.2	(49.6-60.7)	366	54.9	(46.2-63.4)	463	55.6	(49.0-62.0)
\$35,000-\$49,999	1,100	53.5	(49.5-57.4)	498	52.3	(46.6-58.0)	602	54.6	(49.2-60.0)
\$50,000-\$74,999	1,013	50.5	(46.4-54.6)	458	53.3	(47.1-59.4)	555	47.5	(42.2-52.9)
\$75,000+	999	41.5	(37.8-45.3)	508	41.8	(36.7-47.1)	491	41.1	(35.8-46.6)
<b>Education</b>									
8 <sup>th</sup> Grade or Less	230	73.1	(65.2-79.7)	122	69.7	(58.6-78.9)	108	79.2	(69.1-86.7)
Some High School	351	51.3	(42.3-60.3)	137	40.3	(27.7-54.2)	214	62.2	(51.2-72.0)
High School or G.E.D.	2,084	56.7	(53.4-59.9)	922	53.3	(48.9-57.8)	1,162	60.3	(55.6-64.8)
Some Post-High School	1,800	51.8	(48.5-55.1)	642	50.3	(44.9-55.7)	1,158	52.9	(48.9-56.9)
College Graduate	1,913	46.4	(43.3-49.5)	799	46.4	(42.0-51.0)	1,114	46.3	(42.2-50.5)

**Table 10 (continued)**  
**Respondents Who Reported No Moderate Physical Activity, 2007**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Employment Status</b>									
Employed for Wages	3,024	50.8	(48.4-53.3)	1,213	49.3	(45.6-52.9)	1,811	52.4	(49.0-55.7)
Self-employed	885	49.7	(44.8-54.5)	589	50.6	(44.5-56.7)	296	47.4	(40.2-54.7)
Unemployed	153	50.2	(38.2-62.2)	*	*	*	*	*	*
Homemaker	413	53.0	(46.4-59.4)	*	*	*	*	*	*
Retired	1,507	57.9	(54.9-60.8)	590	52.7	(48.0-57.4)	917	62.3	(58.5-65.9)
Unable to Work	302	71.9	(63.4-79.0)	118	76.4	(66.8-83.9)	184	68.3	(55.4-78.9)
<b>Marital Status</b>									
Married/Unmarried Couple	3,871	51.3	(49.3-53.3)	1,702	51.0	(48.1-53.9)	2,169	51.5	(48.8-54.3)
Divorced/Separated	873	57.2	(52.8-61.4)	368	53.6	(46.9-60.3)	505	60.1	(54.4-65.5)
Widowed	946	69.4	(65.9-72.7)	168	60.9	(51.7-69.4)	778	71.4	(67.7-74.8)
Never Married	684	46.5	(40.1-53.1)	383	45.1	(37.2-53.3)	301	48.7	(38.0-59.5)

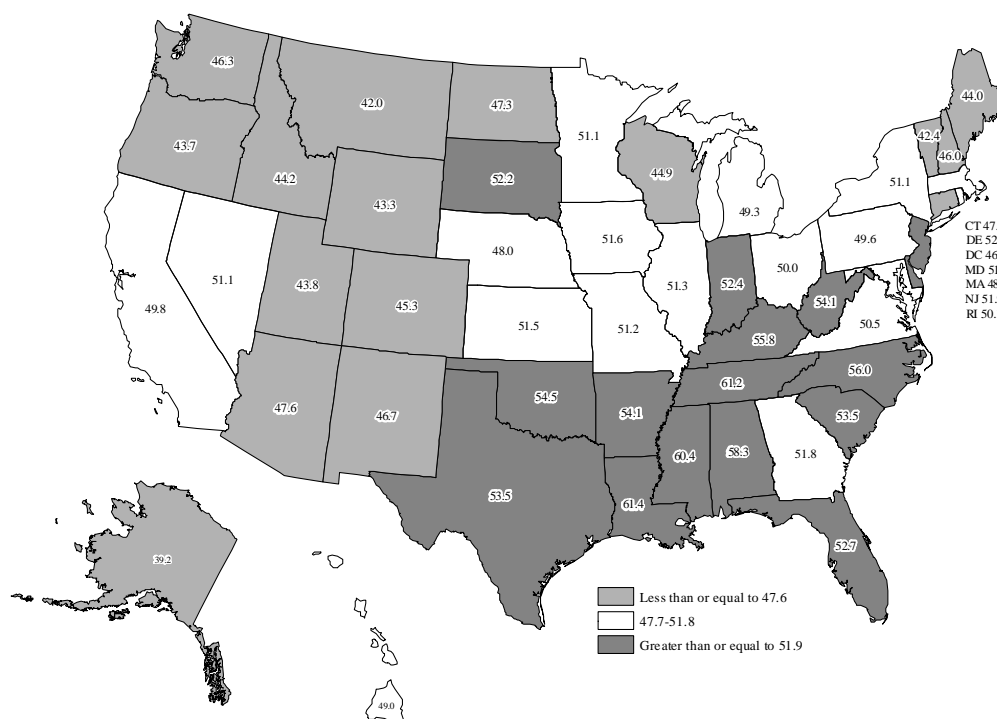
Note: \*Results based on sample sizes less than 100 have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007

## National Statistics

The national median for respondents who reported having no moderate physical activity was 50.5 percent. South Dakota had 52.2 percent of respondents who reported having no moderate physical activity. Alaska had the lowest percent of respondents who reported having no moderate physical activity with 39.2 percent, while Louisiana had the highest percent of respondents who reported having no moderate physical activity with 61.4 percent.

**Figure 8**  
**Nationally, Respondents Who Reported No Moderate Physical Activity, 2007**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007



## **Further Analysis**

Following are data illustrating the percent of those who do not engage in moderate physical activity for various health behaviors and conditions. For example, 60.4 percent of respondents who stated they have high blood pressure have no moderate physical activity, while 49.4 percent of respondents who stated they do not have high blood pressure have no moderate physical activity.

<b>Table 11</b> <b>No Moderate Physical Activity for Selected Health Behaviors and Conditions, 2007</b>			
<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Moderate Physical Activity</b>	<b>95% CI</b>
Obese (BMI = 30.0+)	1,727	59.5	56.1-62.9
Overweight (BMI = 25.0-29.9)	2,411	50.2	47.4-52.9
Recommended Weight (BMI = 18.5-24.9)	1,895	46.5	43.1-50.0
No Leisure Time Physical Activity	1,703	78.9	76.2-81.4
Leisure Time Physical Activity	4,679	44.7	42.7-46.8
Less Than Five Servings of Fruits and Vegetables	5,083	55.2	53.2-57.2
At Least Five Servings of Fruits and Vegetables	1,301	39.0	35.4-42.7
Current Smoker	1,207	55.4	51.1-59.6
Former Smoker	1,846	52.9	50.0-55.8
Never Smoked	3,323	50.9	48.3-53.4
Smokeless Tobacco Use	297	43.7	36.5-51.1
No Smokeless Tobacco Use	5,988	52.9	51.0-54.7
Diabetes	617	67.9	62.8-72.7
No Diabetes	5,770	51.0	49.2-52.9
Hypertension	2,162	60.4	57.7-63.0
No Hypertension	4,221	49.4	47.2-51.6
High Blood Cholesterol	2,089	58.5	55.7-61.2
No High Blood Cholesterol	3,203	48.6	46.1-51.0
No Health Insurance (18-64)	383	51.0	43.6-58.3
Health Insurance (18-64)	3,908	50.0	47.8-52.3
Employer Based Health Insurance Coverage (18-64)	2,519	50.0	47.4-52.6
Private Health Insurance Plan (18-64)	533	43.5	37.5-49.7
Medicare (18-64)	147	77.4	68.8-84.2
Medicaid or Medical Assistance (18-64)	153	61.6	47.9-73.6
The Military, CHAMPUS, TriCare, or the VA (18-64)	225	51.1	40.9-61.2
The Indian Health Service (18-64)	257	47.9	38.7-57.2
No Flu Shot (65+)	448	62.1	56.6-67.3
Flu Shot (65+)	1,464	62.4	59.5-65.3
No Pneumonia Shot (65+)	652	60.9	56.4-65.2
Pneumonia Shot (65+)	1,188	63.3	60.0-66.5
Doesn't Use Sun Block	3,955	51.2	49.0-53.5
Uses Sun Block	1,557	48.0	44.4-51.6
Doesn't Know Cervical Cancer - HPV Connection (Females)	739	64.3	59.7-68.7
Knows Cervical Cancer - HPV Connection (Females)	2,889	51.9	49.1-54.6
Drank Alcohol in Past 30 Days	3,303	48.1	45.8-50.4
No Alcohol in Past 30 Days	3,064	57.4	54.7-60.1
Binge Drinker	842	43.0	38.4-47.8
Not a Binge Drinker	5,457	54.0	52.1-55.9
Heavy Drinker	207	39.0	29.6-49.4
Not a Heavy Drinker	6,037	52.7	50.9-54.6
Previously Had a Heart Attack	437	61.4	55.3-67.2
Never Had a Heart Attack	5,927	51.6	49.7-53.4

**Table 11 (continued)**  
**No Moderate Physical Activity for Selected Health Behaviors and Conditions, 2007**

<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Moderate Physical Activity</b>	<b>95% CI</b>
Have Angina or Coronary Heart Disease	378	59.0	52.9-64.8
Do Not Have Angina or Coronary Heart Disease	5,947	51.8	50.0-53.7
Previously Had a Stroke	246	69.1	61.7-75.5
Never Had a Stroke	6,133	51.7	49.9-53.5
Current Asthma	463	55.6	48.9-62.2
Former Asthma	165	57.6	46.7-67.8
Never Had Asthma	5,721	51.8	49.9-53.7
Arthritis	2,275	59.0	56.3-61.7
No Arthritis	4,094	49.7	47.5-52.0
Arthritis - Activities Limited	1,096	65.4	61.5-69.1
No Arthritis - Activities Limited	5,259	50.2	48.2-52.2
Fair or Poor Health Status	1,059	68.0	64.0-71.8
Excellent, Very Good, or Good Health Status	5,314	50.0	48.0-51.9
Physical Health Not Good for 30 Days of the Past 30	470	69.9	63.8-75.3
Physical Health Not Good for 0-29 Days of the Past 30	5,801	51.0	49.1-52.9
Mental Health Not Good for 20-30 Days of the Past 30	355	58.0	50.4-65.2
Mental Health Not Good for 0-19 Days of the Past 30	5,944	51.8	50.0-53.7
Usual Activities Unattainable for 10-30 Days of the Past 30	455	68.8	62.8-74.3
Usual Activities Unattainable for 0-9 Days of the Past 30	5,884	51.0	49.2-52.9
Dissatisfied / Very Dissatisfied with Life	252	62.6	52.4-71.8
Satisfied / Very Satisfied with Life	6,052	51.7	49.9-53.6
Physical, Mental, or Emotional Disability	1,471	63.8	60.3-67.2
No Physical, Mental, or Emotional Disability	4,906	49.6	47.5-51.6
Disability with Special Equipment Needed	581	71.3	66.4-75.9
No Disability with Special Equipment Needed	5,804	50.9	49.1-52.8
Two or More Hours of TV Watched Per Day	4,670	55.8	53.7-57.9
Less Than Two Hours of TV Watched Per Day	1,531	43.2	39.8-46.7
Never Been Tested for HIV (18-64)	3,319	50.4	48.0-52.9
Been Tested for HIV (18-64)	981	47.5	43.2-51.9
Diarrhea in Past 30 Days	915	55.9	51.0-60.7
No Diarrhea in Past 30 Days	5,374	51.7	49.7-53.6
Military Veteran	939	53.8	49.8-57.8
Not a Military Veteran	5,446	51.9	50.0-53.9

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007

## **NO VIGOROUS PHYSICAL ACTIVITY**

**Definition:** Respondents who report doing less than 20 minutes per day of vigorous physical activity, or less than three days per week of vigorous physical activity.

### **Prevalence of No Vigorous Physical Activity**

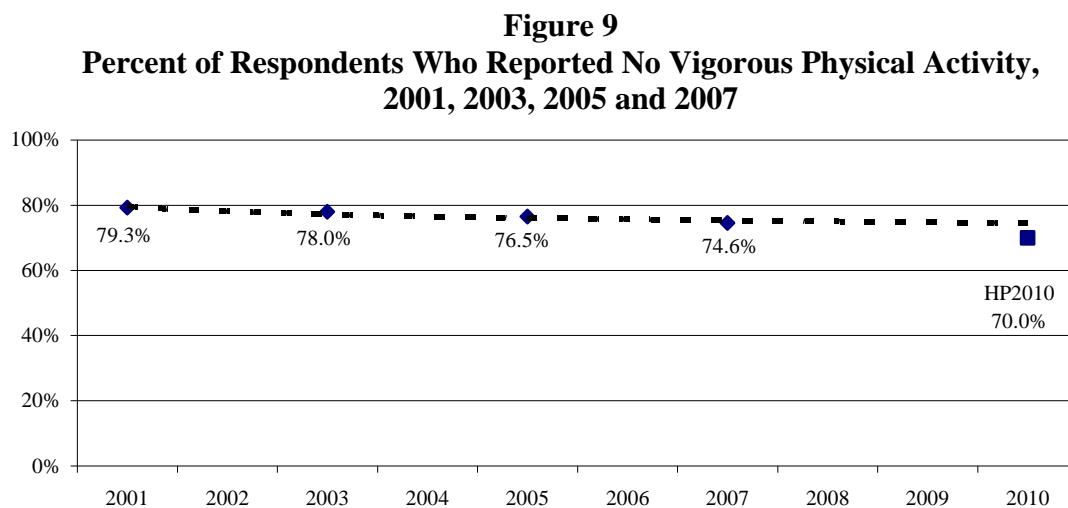
- South Dakota 74.6%
- Nationwide median 71.7%

### **Healthy People 2010 Objective**

*Decrease the proportion of adults who do not engage in vigorous physical activity that promotes the development and maintenance of cardio respiratory fitness 3 or more days per week for 20 or more minutes per occasion to 70 percent.*

### **Trend Analysis**

This question was first asked in 2001 with 79.3 percent of respondents reporting no vigorous physical activity. Since 2001, there has been a decrease each year, reaching a low of 74.6 percent in 2007. South Dakota has yet to meet the *Healthy People 2010 Objective* of 70 percent.



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2001, 2003, 2005 and 2007

### **Demographics**

<b>Gender</b>	Females demonstrate a significantly higher prevalence of no vigorous physical activity than males.
<b>Age</b>	The prevalence of no vigorous physical activity generally increases as age increases. This includes significant increases as the 45-54, 55-64, and 75 and older age groups are reached.
<b>Race</b>	There are no racial differences observed from the available data.
<b>Region</b>	There are no regional differences shown by the available data.
<b>Household Income</b>	The prevalence of no vigorous physical activity generally decreases as household income increases. This association is much more evident in females.

<b>Education</b>	The prevalence of no vigorous physical activity generally decreases as education increases. This includes significant decreases as the some high school and college graduate education levels are reached.
<b>Employment Status</b>	Those who are unable to work demonstrate a very high prevalence of no vigorous physical activity, while those who are employed for wages, self-employed, or unemployed show a very low prevalence.
<b>Marital Status</b>	Those who are widowed exhibit a very high prevalence of no vigorous physical activity, while those who have never been married show a very low prevalence.

**Table 12**  
**Respondents Who Reported No Vigorous Physical Activity, 2007**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Total</b>	<b>6,562</b>	<b>74.6</b>	<b>(73.0-76.2)</b>	<b>2,665</b>	<b>70.0</b>	<b>(67.3-72.6)</b>	<b>3,897</b>	<b>79.0</b>	<b>(77.0-80.8)</b>
<b>Age</b>									
18-24	225	62.4	(54.3-69.9)	114	51.0	(39.7-62.2)	111	73.4	(63.2-81.7)
25-34	734	68.6	(64.5-72.5)	286	62.3	(55.6-68.6)	448	75.1	(70.4-79.3)
35-44	895	67.8	(64.1-71.4)	405	64.6	(58.9-69.8)	490	71.2	(66.1-75.8)
45-54	1,352	76.1	(73.2-78.8)	560	76.3	(71.7-80.4)	792	75.9	(72.3-79.3)
55-64	1,282	82.1	(79.4-84.5)	543	80.1	(75.8-83.8)	739	84.3	(80.9-87.2)
65-74	1,007	84.6	(81.7-87.1)	399	82.1	(77.4-86.0)	608	86.8	(83.0-89.8)
75+	1,004	91.1	(88.7-93.0)	348	87.0	(82.2-90.6)	656	93.7	(91.1-95.5)
<b>Race</b>									
White	5,753	75.0	(73.2-76.6)	2,342	71.1	(68.3-73.8)	3,411	78.5	(76.5-80.5)
American Indian	567	70.7	(64.0-76.7)	219	59.3	(48.7-69.1)	348	81.5	(73.9-87.2)
<b>Region</b>									
Southeast	1,454	74.5	(71.2-77.4)	604	69.3	(64.1-74.1)	850	79.5	(75.8-82.8)
Northeast	1,432	76.1	(72.9-79.1)	604	72.2	(67.1-76.8)	828	80.3	(76.4-83.7)
Central	1,363	76.8	(73.6-79.8)	542	75.7	(70.3-80.3)	821	77.8	(73.7-81.4)
West	1,468	73.1	(69.9-76.1)	571	66.9	(61.8-71.7)	897	77.8	(73.7-81.5)
American Indian Counties	845	71.0	(65.9-75.7)	344	65.3	(57.5-72.4)	501	76.7	(69.7-82.5)
<b>Household Income</b>									
Less than \$10,000	294	88.4	(81.9-92.8)	*	*	*	*	*	*
\$10,000-\$14,999	353	85.5	(77.4-91.1)	115	74.7	(60.0-85.3)	238	91.9	(81.6-96.6)
\$15,000-\$19,999	482	84.6	(78.3-89.4)	168	77.4	(64.5-86.6)	314	89.7	(84.2-93.5)
\$20,000-\$24,999	630	78.6	(72.9-83.4)	217	72.8	(62.7-81.0)	413	82.4	(75.8-87.6)
\$25,000-\$34,999	851	79.2	(73.2-84.1)	370	74.6	(64.5-82.6)	481	84.3	(79.1-88.5)
\$35,000-\$49,999	1,117	77.4	(73.8-80.6)	503	75.2	(69.8-79.9)	614	79.6	(74.8-83.7)
\$50,000-\$74,999	1,026	70.7	(66.5-74.5)	462	70.4	(64.2-76.0)	564	71.0	(65.4-76.0)
\$75,000+	1,009	63.3	(59.5-66.9)	512	59.8	(54.5-64.9)	497	68.0	(62.8-72.8)
<b>Education</b>									
8 <sup>th</sup> Grade or Less	243	93.1	(88.6-95.9)	127	93.6	(87.7-96.8)	116	92.2	(83.5-96.5)
Some High School.	367	72.2	(62.3-80.4)	143	63.1	(47.6-76.3)	224	81.2	(69.5-89.1)
High School or G.E.D.	2,143	79.1	(76.2-81.7)	937	73.8	(69.3-77.8)	1,206	84.8	(81.2-87.8)
Some Post-High School	1,849	75.1	(72.0-78.0)	647	68.7	(63.2-73.8)	1,202	79.8	(76.4-82.9)
College Graduate	1,949	68.4	(65.4-71.3)	809	65.7	(60.9-70.2)	1,140	71.1	(67.4-74.6)

Table 12 (continued)									
Respondents Who Reported No Vigorous Physical Activity, 2007									
	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Employment Status</b>									
Employed for Wages	3,069	71.4	(69.1-73.6)	1,218	67.0	(63.4-70.5)	1,851	75.6	(72.7-78.3)
Self-employed	909	72.2	(67.1-76.9)	604	70.3	(63.5-76.2)	305	77.3	(70.8-82.7)
Unemployed	157	64.6	(52.0-75.4)	*	*	*	*	*	*
Homemaker	422	81.1	(75.6-85.5)	*	*	*	*	*	*
Retired	1,583	84.9	(82.5-86.9)	601	82.1	(78.1-85.5)	982	87.1	(84.3-89.5)
Unable to Work	315	95.4	(92.3-97.3)	124	94.6	(88.8-97.5)	191	96.1	(92.1-98.2)
<b>Marital Status</b>									
Married/Unmarried Couple	3,947	74.3	(72.5-76.0)	1,723	71.3	(68.6-73.9)	2,224	77.2	(75.0-79.3)
Divorced/Separated	893	79.5	(75.6-83.0)	378	76.8	(70.4-82.2)	515	81.8	(76.7-85.9)
Widowed	1,005	91.8	(89.7-93.5)	171	86.2	(79.4-91.1)	834	93.0	(90.8-94.6)
Never Married	702	66.4	(59.8-72.4)	389	60.7	(52.1-68.7)	313	74.9	(65.3-82.6)

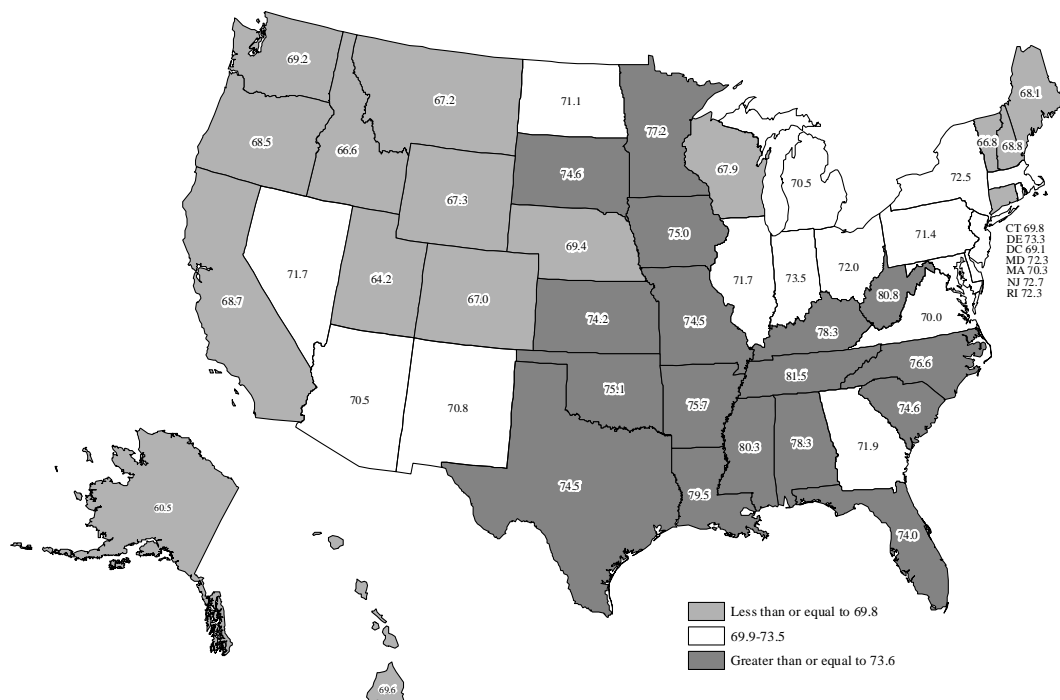
Note: \*Results based on sample sizes less than 100 have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007

## National Statistics

The national median for respondents who reported having no vigorous physical activity was 71.7 percent. South Dakota had 74.6 percent of respondents who reported having no vigorous physical activity. Alaska had the lowest percent of respondents who reported having no vigorous physical activity with 60.5 percent, while Tennessee had the highest percent of respondents who reported having no vigorous physical activity with 81.5 percent.

**Figure 10**  
Nationally, Respondents Who Reported No Vigorous Physical Activity, 2007



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007

## Further Analysis

Following are data illustrating the percent of those who do not engage in vigorous physical activity for various health behaviors and conditions. For example, 87.1 percent of respondents who stated they have diabetes do not participate in vigorous physical activity, while 73.7 percent of respondents who do not have diabetes do not participate in vigorous physical activity.

<b>Table 13</b> <b>No Vigorous Physical Activity for Selected Health Behaviors and Conditions, 2007</b>			
<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Vigorous Physical Activity</b>	<b>95% CI</b>
Obese (BMI = 30.0+)	1,766	80.7	77.7-83.3
Overweight (BMI = 25.0-29.9)	2,457	72.9	70.2-75.5
Recommended Weight (BMI = 18.5-24.9)	1,956	70.0	66.7-73.1
No Leisure Time Physical Activity	1,768	94.3	92.4-95.7
Leisure Time Physical Activity	4,788	69.0	67.0-70.9
Less Than Five Servings of Fruits and Vegetables	5,232	76.9	75.1-78.6
At Least Five Servings of Fruits and Vegetables	1,326	64.9	60.7-68.8
Current Smoker	1,235	77.1	73.2-80.6
Former Smoker	1,903	77.6	75.0-80.0
Never Smoked	3,412	72.5	70.1-74.8
Smokeless Tobacco Use	299	66.8	58.8-73.9
No Smokeless Tobacco Use	6,156	75.0	73.3-76.7
Diabetes	637	87.1	82.7-90.4
No Diabetes	5,924	73.7	71.9-75.4
Hypertension	2,241	82.5	80.3-84.6
No Hypertension	4,315	71.9	69.8-73.9
High Blood Cholesterol	2,148	78.8	76.3-81.1
No High Blood Cholesterol	3,281	72.9	70.5-75.1
No Health Insurance (18-64)	395	76.7	69.5-82.7
Health Insurance (18-64)	3,967	70.9	68.8-73.0
Employer Based Health Insurance Coverage (18-64)	2,551	70.5	68.1-72.9
Private Health Insurance Plan (18-64)	542	68.3	61.0-74.8
Medicare (18-64)	154	95.1	90.6-97.5
Medicaid or Medical Assistance (18-64)	157	83.0	73.7-89.5
The Military, CHAMPUS, TriCare, or the VA (18-64)	227	68.4	59.1-76.5
The Indian Health Service (18-64)	263	65.5	55.5-74.3
No Flu Shot (65+)	473	86.1	81.8-89.4
Flu Shot (65+)	1,531	88.5	86.4-90.3
No Pneumonia Shot (65+)	682	85.6	82.1-88.4
Pneumonia Shot (65+)	1,244	89.4	87.1-91.3
Doesn't Use Sun Block	4,057	73.5	71.3-75.5
Uses Sun Block	1,590	71.4	68.2-74.4
Doesn't Know Cervical Cancer - HPV Connection (Females)	783	87.2	83.8-90.0
Knows Cervical Cancer - HPV Connection (Females)	2,972	77.1	74.8-79.2
Drank Alcohol in Past 30 Days	3,360	69.9	67.5-72.1
No Alcohol in Past 30 Days	3,178	80.7	78.4-82.8
Binge Drinker	848	64.9	59.7-69.8
Not a Binge Drinker	5,616	76.5	74.8-78.1
Heavy Drinker	210	71.2	61.0-79.7
Not a Heavy Drinker	6,185	74.6	72.9-76.3
Previously Had a Heart Attack	451	82.2	76.0-87.0
Never Had a Heart Attack	6,086	74.2	72.4-75.8
Have Angina or Coronary Heart Disease	391	80.8	75.0-85.4
Do Not Have Angina or Coronary Heart Disease	6,104	74.3	72.6-76.0

**Table 13 (continued)**  
**No Vigorous Physical Activity for Selected Health Behaviors and Conditions, 2007**

<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Vigorous Physical Activity</b>	<b>95% CI</b>
Previously Had a Stroke	255	90.6	85.5-94.0
Never Had a Stroke	6,297	74.2	72.5-75.8
Current Asthma	481	77.9	71.9-83.0
Former Asthma	168	81.5	72.9-87.8
Never Had Asthma	5,876	74.1	72.3-75.8
Arthritis	2,353	82.7	80.4-84.8
No Arthritis	4,188	71.7	69.6-73.7
Arthritis - Activities Limited	1,142	85.8	82.5-88.5
No Arthritis - Activities Limited	5,383	72.9	71.0-74.7
Fair or Poor Health Status	1,106	89.6	86.6-91.9
Excellent, Very Good, or Good Health Status	5,437	72.5	70.6-74.2
Physical Health Not Good for 30 Days of the Past 30	484	88.8	83.3-92.7
Physical Health Not Good for 0-29 Days of the Past 30	5,946	73.6	71.8-75.2
Mental Health Not Good for 20-30 Days of the Past 30	363	82.0	75.6-87.1
Mental Health Not Good for 0-19 Days of the Past 30	6,091	74.1	72.4-75.8
Usual Activities Unattainable for 10-30 Days of the Past 30	468	88.2	82.9-92.0
Usual Activities Unattainable for 0-9 Days of the Past 30	6,036	73.7	71.9-75.3
Dissatisfied / Very Dissatisfied with Life	266	82.1	71.9-89.1
Satisfied / Very Satisfied with Life	6,210	74.1	72.4-75.8
Physical, Mental, or Emotional Disability	1,523	85.6	82.7-88.0
No Physical, Mental, or Emotional Disability	5,026	72.1	70.2-73.9
Disability with Special Equipment Needed	599	89.2	85.2-92.2
No Disability with Special Equipment Needed	5,960	73.6	71.9-75.3
Two or More Hours of TV Watched Per Day	4,800	77.3	75.3-79.1
Less Than Two Hours of TV Watched Per Day	1,557	66.9	63.6-70.1
Never Been Tested for HIV (18-64)	3,380	71.5	69.1-73.8
Been Tested for HIV (18-64)	990	70.4	66.6-74.0
Diarrhea in Past 30 Days	949	79.4	75.1-83.1
No Diarrhea in Past 30 Days	5,510	73.7	71.9-75.5
Military Veteran	963	74.9	71.0-78.5
Not a Military Veteran	5,596	74.6	72.7-76.3

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007

## **LESS THAN FIVE SERVINGS OF FRUITS AND VEGETABLES**

**Definition:** Respondents who report they consume less than five servings of fruits and vegetables per day.

### **Prevalence Not Consuming at Least Five Servings of Fruits and Vegetables Per Day**

- South Dakota 81.4%
- Nationwide median 75.6%

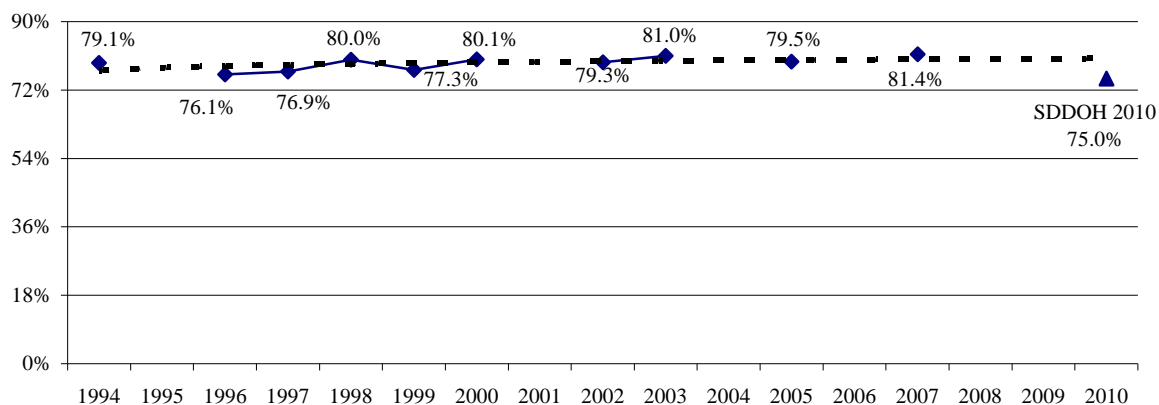
### **South Dakota Department of Health 2010 Initiative**

*Decrease the percent of adults who do not consume at least five servings of fruits and vegetables per day to 75 percent.*

### **Trend Analysis**

This question was first asked in 1994 with 79.1 percent of respondents who reported not consuming at least 5 servings of fruits and vegetables per day. Overall, the percent of respondents who report not consuming as least 5 servings of fruits and vegetables per day has remained steady. South Dakota has yet to meet the *SD Department of Health's 2010 Initiative* goal of 75 percent.

**Figure 11**  
**Percent of Respondents Who Reported Not Consuming at Least 5 Servings of Fruits and Vegetables Per Day, 1994, 1996-2000, 2002-2003, 2005 and 2007**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1994, 1996-2000, 2002-2003, 2005 and 2007

### **Demographics**

**Gender** Males show a significantly higher percentage of low fruit and vegetable consumption per day than females. This gender difference is evident across several demographics including whites, higher levels of education, and those who are married.

**Age** Low fruit and vegetable consumption generally decreases as age increases. This decrease as age increases is more evident in females than males.

**Race** There are no racial differences demonstrated by the available data.



<b>Region</b>	There are no regional differences exhibited by the available data.
<b>Household Income</b>	Low fruit and vegetable consumption generally decreases as household income increases.
<b>Education</b>	Low fruit and vegetable consumption generally decreases for females as education levels increase. Males do not exhibit this same association.
<b>Employment Status</b>	Those who are employed for wages exhibit a very high prevalence of low fruit and vegetable consumption, while those who are homemakers or retired show a very low prevalence.
<b>Marital Status</b>	Those who have never been married demonstrate a very high prevalence of low fruit and vegetable consumption, while those who are widowed show a very low prevalence. These extremes are much more evident in females.

**Table 14**  
**Respondents Who Reported Not Consuming at Least 5 Servings of Fruits and Vegetables Per Day, 2007**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Total</b>	<b>6,742</b>	<b>81.4</b>	<b>(80.1-82.7)</b>	<b>2,753</b>	<b>84.8</b>	<b>(82.7-86.7)</b>	<b>3,989</b>	<b>78.1</b>	<b>(76.4-79.8)</b>
<b>Age</b>									
18-24	234	86.5	(79.7-91.3)	119	84.5	(72.4-91.9)	115	88.5	(81.1-93.2)
25-34	750	83.5	(80.2-86.4)	297	86.9	(81.6-90.9)	453	80.0	(75.4-83.8)
35-44	913	81.8	(78.7-84.6)	412	84.8	(80.2-88.5)	501	78.7	(74.2-82.6)
45-54	1,389	83.9	(81.5-86.1)	584	90.8	(87.5-93.2)	805	77.2	(73.5-80.5)
55-64	1,322	81.0	(78.4-83.4)	561	84.1	(80.1-87.4)	761	77.7	(74.1-80.9)
65-74	1,037	76.6	(73.4-79.6)	412	79.8	(74.6-84.1)	625	73.9	(69.7-77.8)
75+	1,032	70.5	(67.1-73.7)	356	74.2	(68.5-79.1)	676	68.2	(63.9-72.2)
<b>Race</b>									
White	5,913	81.4	(80.0-82.8)	2,421	85.0	(82.7-87.1)	3,492	78.1	(76.2-79.8)
American Indian	580	82.4	(77.6-86.4)	224	85.7	(78.7-90.6)	356	79.3	(72.4-84.9)
<b>Region</b>									
Southeast	1,500	81.5	(78.8-84.0)	624	84.1	(79.5-87.8)	876	79.0	(75.7-81.9)
Northeast	1,466	83.5	(81.2-85.5)	617	88.1	(85.1-90.6)	849	78.5	(75.0-81.6)
Central	1,414	80.4	(77.7-82.8)	571	86.1	(82.6-88.9)	843	75.3	(71.2-78.9)
West	1,501	79.1	(76.4-81.5)	589	81.3	(77.0-84.9)	912	77.3	(73.7-80.5)
American Indian Counties	861	83.6	(79.8-86.7)	352	85.9	(80.0-90.2)	509	81.2	(76.1-85.5)
<b>Household Income</b>									
Less than \$10,000	305	84.4	(77.9-89.3)	100	84.3	(73.1-91.4)	205	84.5	(75.8-90.4)
\$10,000-\$14,999	363	84.0	(78.9-88.1)	120	84.6	(74.6-91.1)	243	83.7	(77.5-88.4)
\$15,000-\$19,999	494	80.9	(75.8-85.1)	174	86.0	(79.0-90.9)	320	77.3	(69.9-83.3)
\$20,000-\$24,999	649	80.3	(75.2-84.6)	226	80.3	(71.4-86.9)	423	80.3	(73.9-85.5)
\$25,000-\$34,999	873	80.0	(74.0-84.8)	383	81.0	(70.1-88.6)	490	78.8	(73.4-83.3)
\$35,000-\$49,999	1,142	83.3	(80.4-85.9)	518	86.3	(81.8-89.9)	624	80.3	(76.4-83.7)
\$50,000-\$74,999	1,056	83.1	(80.2-85.6)	481	89.7	(86.4-92.3)	575	75.9	(71.1-80.0)
\$75,000+	1,022	79.7	(76.6-82.4)	520	82.2	(77.9-85.9)	502	76.2	(71.6-80.3)
<b>Education</b>									
8 <sup>th</sup> Grade or Less	253	77.5	(69.7-83.9)	132	76.5	(65.2-85.0)	121	79.3	(69.0-86.8)
Some High School	375	84.8	(77.5-90.0)	146	86.9	(74.0-93.9)	229	82.8	(73.6-89.2)
High School or G.E.D.	2,231	85.1	(83.0-87.0)	981	87.5	(84.4-90.1)	1,250	82.5	(79.5-85.1)
Some Post-High School	1,894	82.2	(79.8-84.4)	670	86.9	(82.9-90.1)	1,224	78.7	(75.6-81.5)
College Graduate	1,977	76.5	(73.7-79.1)	821	80.6	(75.9-84.6)	1,156	72.4	(69.0-75.6)

**Table 14 (continued)**  
**Respondents Who Reported Not Consuming at Least 5 Servings of Fruits and Vegetables**  
**Per Day, 2007**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Employment Status</b>									
Employed for Wages	3,143	84.5	(82.8-86.0)	1,260	87.8	(85.4-89.9)	1,883	81.2	(78.8-83.3)
Self-employed	949	80.5	(75.3-84.7)	630	81.4	(74.3-86.9)	319	78.0	(72.0-83.0)
Unemployed	161	84.6	(74.0-91.4)	*	*	*	*	*	*
Homemaker	435	72.1	(66.6-77.0)	*	*	*	*	*	*
Retired	1,624	74.5	(71.9-77.0)	614	79.2	(75.1-82.8)	1,010	70.7	(67.3-74.0)
Unable to work	322	77.6	(70.8-83.2)	130	81.3	(72.4-87.8)	192	74.3	(63.9-82.6)
<b>Marital Status</b>									
Married/Unmarried Couple	4,050	80.5	(79.0-81.9)	1,780	84.3	(82.1-86.3)	2,270	76.7	(74.6-78.8)
Divorced/Separated	919	82.2	(78.6-85.2)	392	86.3	(80.7-90.4)	527	78.7	(73.8-82.9)
Widowed	1,038	77.9	(74.9-80.7)	176	86.6	(79.0-91.8)	862	76.1	(72.7-79.2)
Never Married	719	86.2	(81.0-90.2)	400	85.4	(77.4-90.9)	319	87.4	(81.5-91.7)

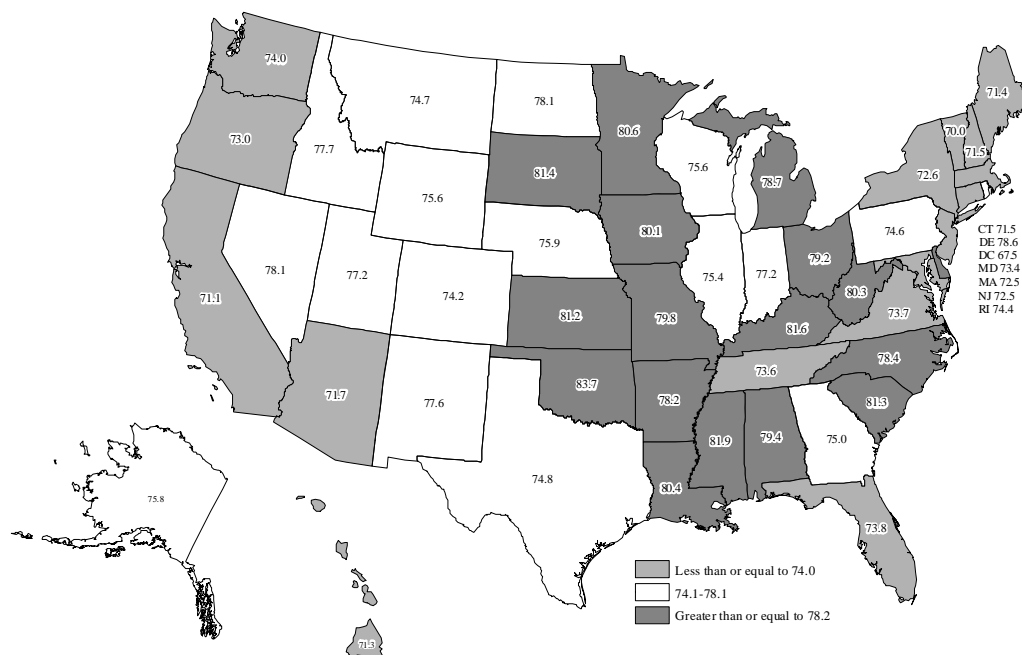
Note: \*Results based on sample sizes less than 100 have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007

## National Statistics

The national median for respondents who have reported they do not consume at least five servings of fruits and vegetables per day was 75.6 percent. South Dakota had 81.4 percent of respondents who have reported they do not consume at least five servings of fruits and vegetables per day. The District of Columbia had the lowest percent of respondents who reported not consuming at least five servings of fruits and vegetables per day with 67.5 percent, while Oklahoma had the highest percent of respondents who reported not consuming at least five servings of fruits and vegetables per day with 83.7 percent.

**Figure 12**  
**Nationally, Respondents Who Reported Not Consuming at Least 5 Servings of**  
**Fruits and Vegetables Per Day, 2007**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007

## **Further Analysis**

Following are data illustrating the percent of those who do not consume at least five servings of fruits and vegetables per day for various health behaviors and conditions. For example, 93.4 percent of respondents who use smokeless tobacco did not consume at least five servings of fruits and vegetables per day, while 80.6 percent of respondents who do not use smokeless tobacco did not consume at least five servings of fruits and vegetables per day.

**Table 15**  
**Not Consuming at Least 5 Servings of Fruits and Vegetables Per Day for Selected Health Behaviors and Conditions, 2007**

<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% Not Consuming 5 Servings of Fruits and Vegetables</b>	<b>95% CI</b>
Obese (BMI = 30.0+)	1,807	86.3	84.1-88.2
Overweight (BMI = 25.0-29.9)	2,516	79.9	77.4-82.2
Recommended Weight (BMI = 18.5-24.9)	2,017	78.8	76.4-81.1
No Leisure Time Physical Activity	1,825	87.0	85.0-88.8
Leisure Time Physical Activity	4,911	79.8	78.1-81.3
No Moderate Physical Activity	3,548	86.0	84.5-87.4
Moderate Physical Activity	2,836	76.1	73.8-78.3
No Vigorous Physical Activity	5,212	83.8	82.5-85.1
Vigorous Physical Activity	1,346	74.2	70.7-77.5
Current Smoker	1,272	89.3	86.7-91.5
Former Smoker	1,955	80.2	78.0-82.3
Never Smoked	3,503	79.1	77.1-81.0
Smokeless Tobacco Use	307	93.4	89.5-95.9
No Smokeless Tobacco Use	6,270	80.6	79.2-81.9
Diabetes	651	74.3	69.5-78.6
No Diabetes	6,090	81.9	80.5-83.2
Hypertension	2,294	78.4	76.2-80.5
No Hypertension	4,442	82.4	80.7-83.9
High Blood Cholesterol	2,198	80.8	78.8-82.7
No High Blood Cholesterol	3,361	77.7	75.5-79.7
No Health Insurance (18-64)	407	86.2	80.9-90.2
Health Insurance (18-64)	4,032	82.6	80.9-84.2
Employer Based Health Insurance Coverage (18-64)	2,586	83.2	81.4-85.0
Private Health Insurance Plan (18-64)	558	79.8	72.1-85.9
Medicare (18-64)	157	81.7	73.8-87.6
Medicaid or Medical Assistance (18-64)	158	87.5	79.6-92.7
The Military, CHAMPUS, TriCare, or the VA (18-64)	229	79.9	71.6-86.2
The Indian Health Service (18-64)	266	83.4	76.8-88.5
No Flu Shot (65+)	491	73.7	68.7-78.2
Flu Shot (65+)	1,571	73.4	70.7-75.9
No Pneumonia Shot (65+)	710	75.3	71.3-78.9
Pneumonia Shot (65+)	1,272	72.6	69.6-75.5
Doesn't Use Sun Block	4,150	84.5	82.9-86.1
Uses Sun Block	1,610	75.4	72.5-78.0
Doesn't Know Cervical Cancer - HPV Connection (Females)	799	78.6	74.6-82.1
Knows Cervical Cancer - HPV Connection (Females)	3,015	77.7	75.7-79.6
Drank Alcohol in Past 30 Days	3,449	82.9	81.1-84.6
No Alcohol in Past 30 Days	3,267	79.4	77.4-81.3
Binge Drinker	866	88.7	84.1-92.1
Not a Binge Drinker	5,771	79.8	78.4-81.2

**Table 15 (continued)**  
**Not Consuming at Least 5 Servings of Fruits and Vegetables Per Day for Selected Health Behaviors and Conditions, 2007**

<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% Not Consuming 5 Servings of Fruits and Vegetables</b>	<b>95% CI</b>
Heavy Drinker	215	91.6	86.1-95.0
Not a Heavy Drinker	6,351	80.9	79.5-82.2
Previously Had a Heart Attack	459	78.3	73.4-82.6
Never Had a Heart Attack	6,257	81.5	80.1-82.8
Have Angina or Coronary Heart Disease	396	75.3	69.9-80.0
Do Not Have Angina or Coronary Heart Disease	6,274	81.7	80.3-83.0
Previously Had a Stroke	263	76.0	69.2-81.7
Never Had a Stroke	6,467	81.6	80.2-82.8
Current Asthma	493	80.8	75.6-85.1
Former Asthma	172	78.9	69.4-86.1
Never Had Asthma	6,037	81.6	80.2-82.9
Arthritis	2,416	77.8	75.6-79.8
No Arthritis	4,305	82.7	81.0-84.3
Arthritis - Activities Limited	1,161	77.1	73.9-79.9
No Arthritis - Activities Limited	5,541	82.0	80.5-83.4
Fair or Poor Health Status	1,133	81.8	78.8-84.4
Excellent, Very Good, or Good Health Status	5,589	81.4	79.9-82.8
Physical Health Not Good for 30 Days of the Past 30	497	80.7	75.9-84.8
Physical Health Not Good for 0-29 Days of the Past 30	6,102	81.5	80.1-82.8
Mental Health Not Good for 20-30 Days of the Past 30	371	80.2	74.2-85.0
Mental Health Not Good for 0-19 Days of the Past 30	6,254	81.5	80.1-82.8
Usual Activities Unattainable for 10-30 Days of the Past 30	484	78.5	73.4-82.8
Usual Activities Unattainable for 0-9 Days of the Past 30	6,198	81.7	80.3-83.0
Dissatisfied / Very Dissatisfied with Life	269	84.7	77.7-89.7
Satisfied / Very Satisfied with Life	6,330	81.3	79.9-82.6
Physical, Mental, or Emotional Disability	1,557	79.7	77.2-82.1
No Physical, Mental, or Emotional Disability	5,172	81.8	80.3-83.3
Disability with Special Equipment Needed	609	75.4	70.8-79.4
No Disability with Special Equipment Needed	6,130	81.8	80.4-83.1
Two or More Hours of TV Watched Per Day	4,886	82.7	81.1-84.1
Less Than Two Hours of TV Watched Per Day	1,587	77.7	74.9-80.3
Never Been Tested for HIV (18-64)	3,444	83.6	81.7-85.3
Been Tested for HIV (18-64)	1,002	82.5	79.4-85.2
Diarrhea in Past 30 Days	965	86.4	83.5-88.9
No Diarrhea in Past 30 Days	5,614	80.5	79.0-81.9
Military Veteran	985	81.5	78.2-84.4
Not a Military Veteran	5,754	81.4	79.9-82.8

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007